



Labor Force Analytics

MAG POPTAC Committee

April 28, 2015



Background

- MAG Economic Development Roadshow
 - Started in November 2013
 - Engage Economic Development teams
 - 33 Meetings with 220 attendees
 - Planners and ED Partnership Exchange
- Need: Workforce and Skills Data
 - Began collaboration with ASU, MCC, West-MEC and EVIT
- ASU Alumni & Current Graduates – Spring 1990 to Spring 2014
 - Alumni : Major and semester degree awarded (current location by address)
 - Current students filing for graduation
- West-MEC & East Valley Institute of Technology
 - Completions 2010-2014 (by Zip and program)
- Maricopa Community Colleges
 - Completions 2013-2014 (by address and program)

Thanks To



Angela Creedon

Associate Vice President
Community & Municipal Relations

Melinda Gebel

Director, Office of Institutional Analysis



Russell "Rusty" Bowers

Director of External Affairs

Andrea Rabago

Systems Specialist



John Catapano

Manager, Research and Communications

Randy Kimmens

Director, Workforce Development



Diane B. McCarthy, Director

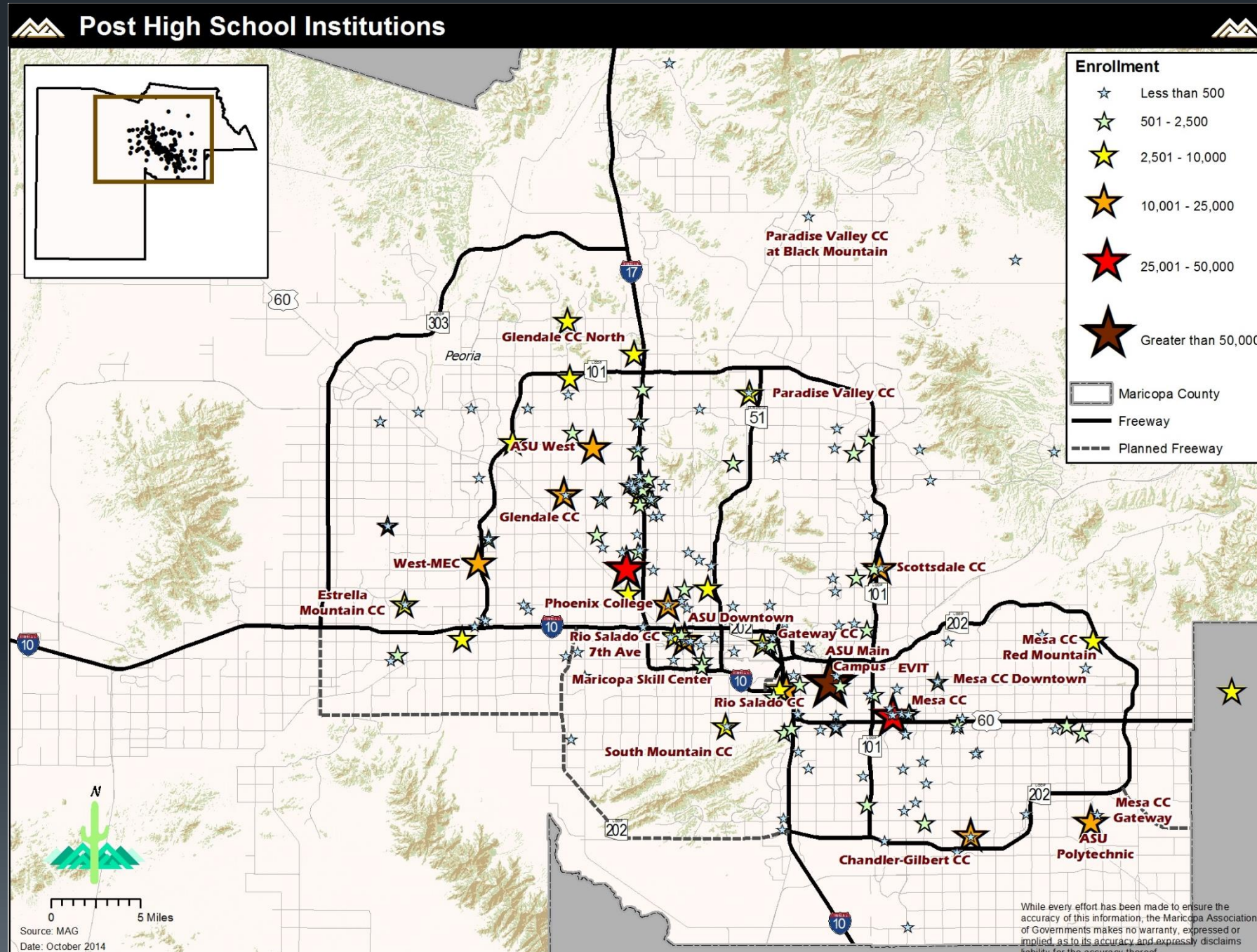
Business Partnerships & Government Affairs

Andi Larkin

SAIS Specialist

210

Vocational: 88
 Community College Sites: 38
 Public University: 21
 Private University: 51
 Private Colleges: 10



ASU: Graduates Residing in Arizona



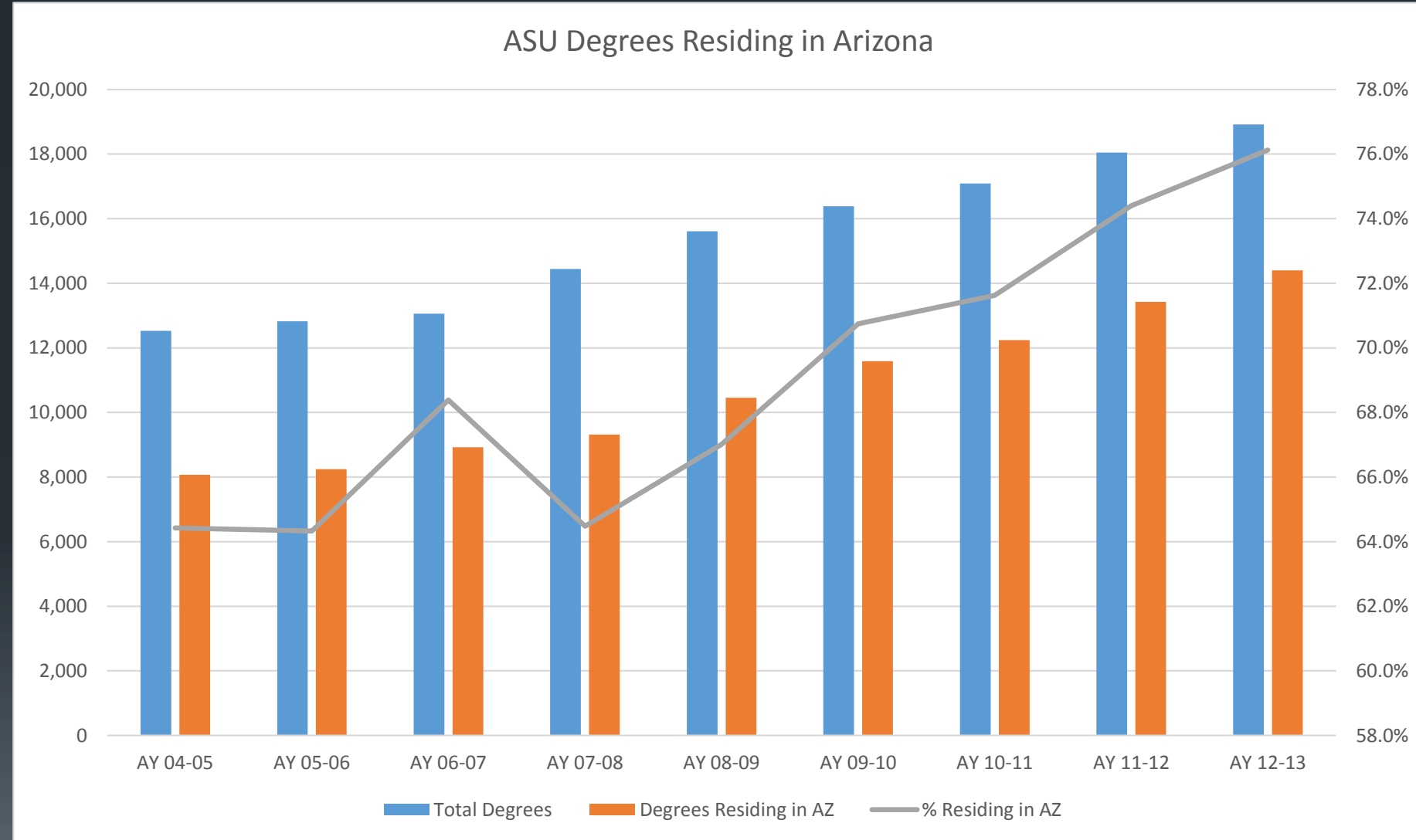
1990 to Spring 2014

187,289 in Arizona

175,442 in Phoenix Metro

64.9 % Residing in AZ

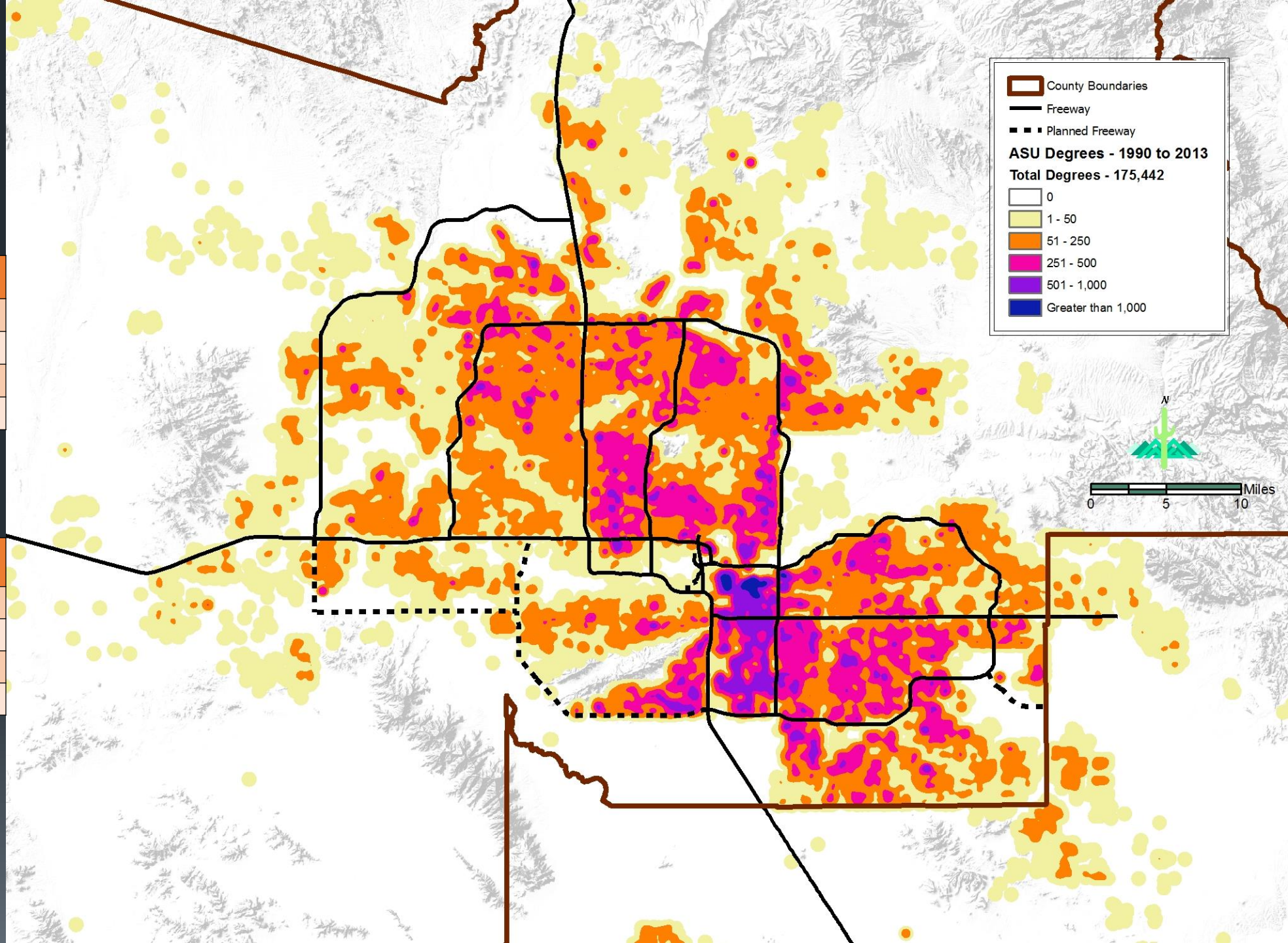
**69.6% Residing in AZ
(2004 – Spring 2014)**



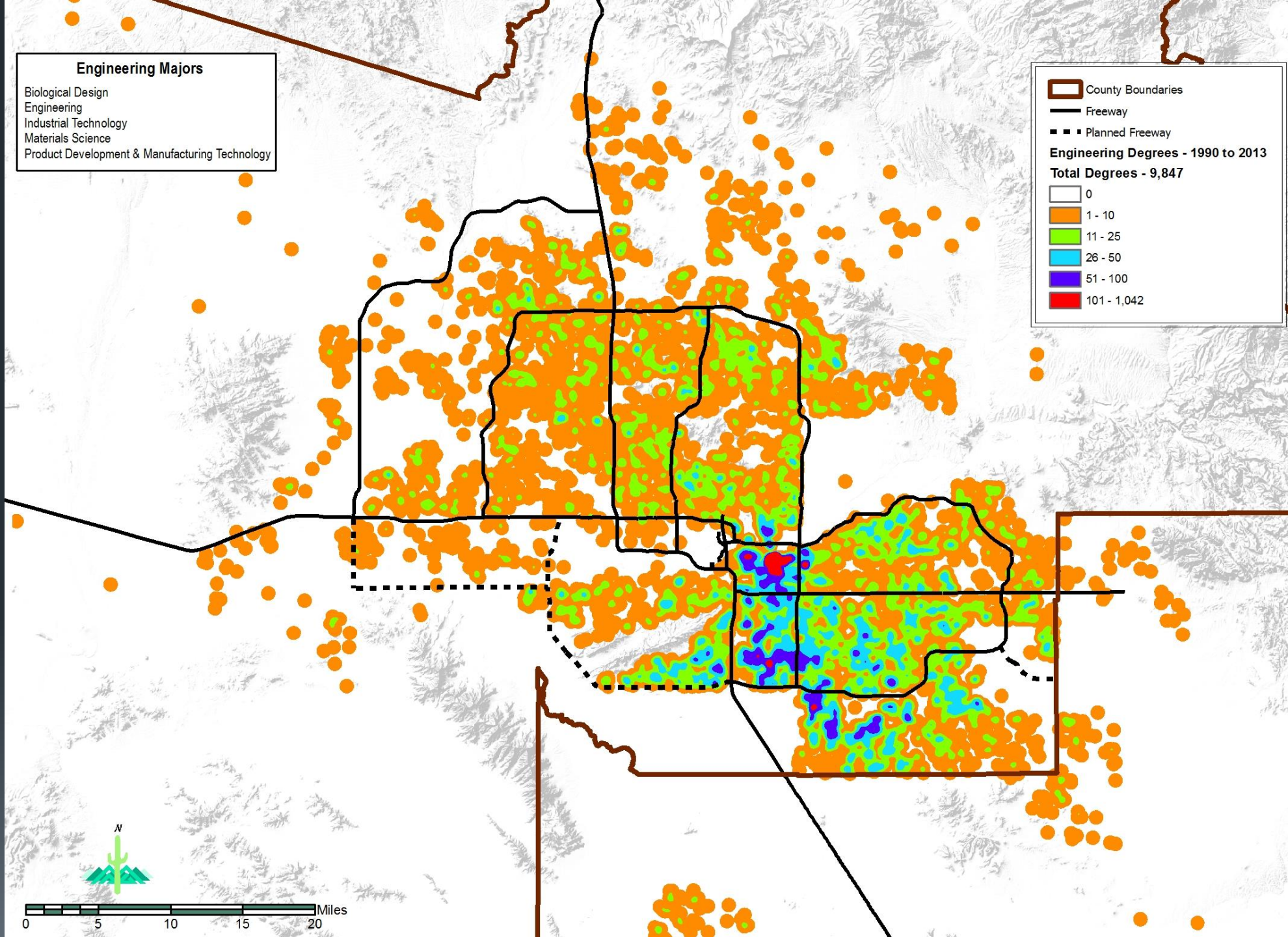
ASU: Graduates (1990-Spring 2014)

Time Period	Degrees
1990-1995	24,543
1996-2001	32,679
2002-2007	44,102
2008-2014	74,155

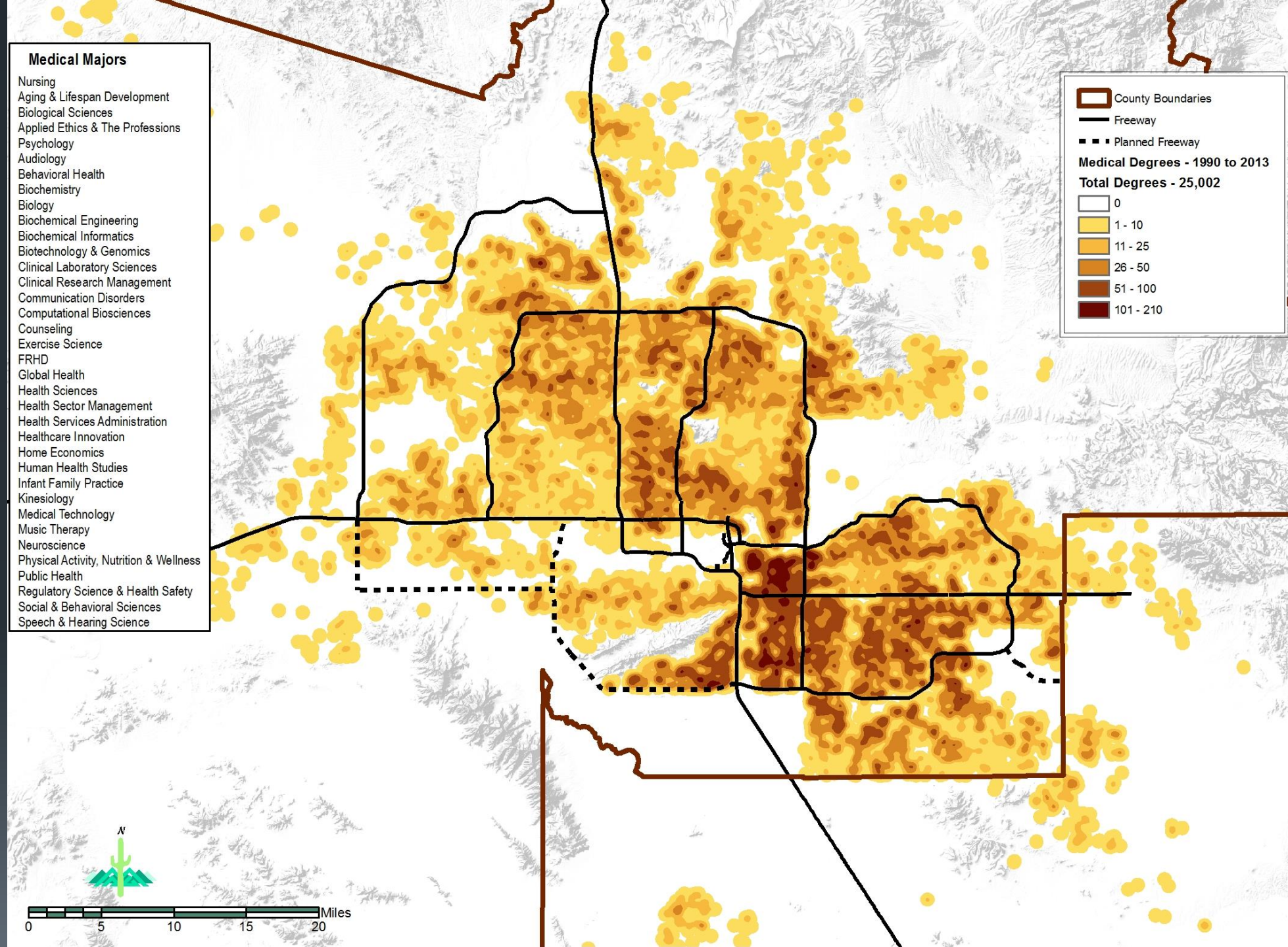
Degree Type	Degrees
Bachelor	136,207
Master	33,501
Doctoral	3,183
First-Professional	2,588



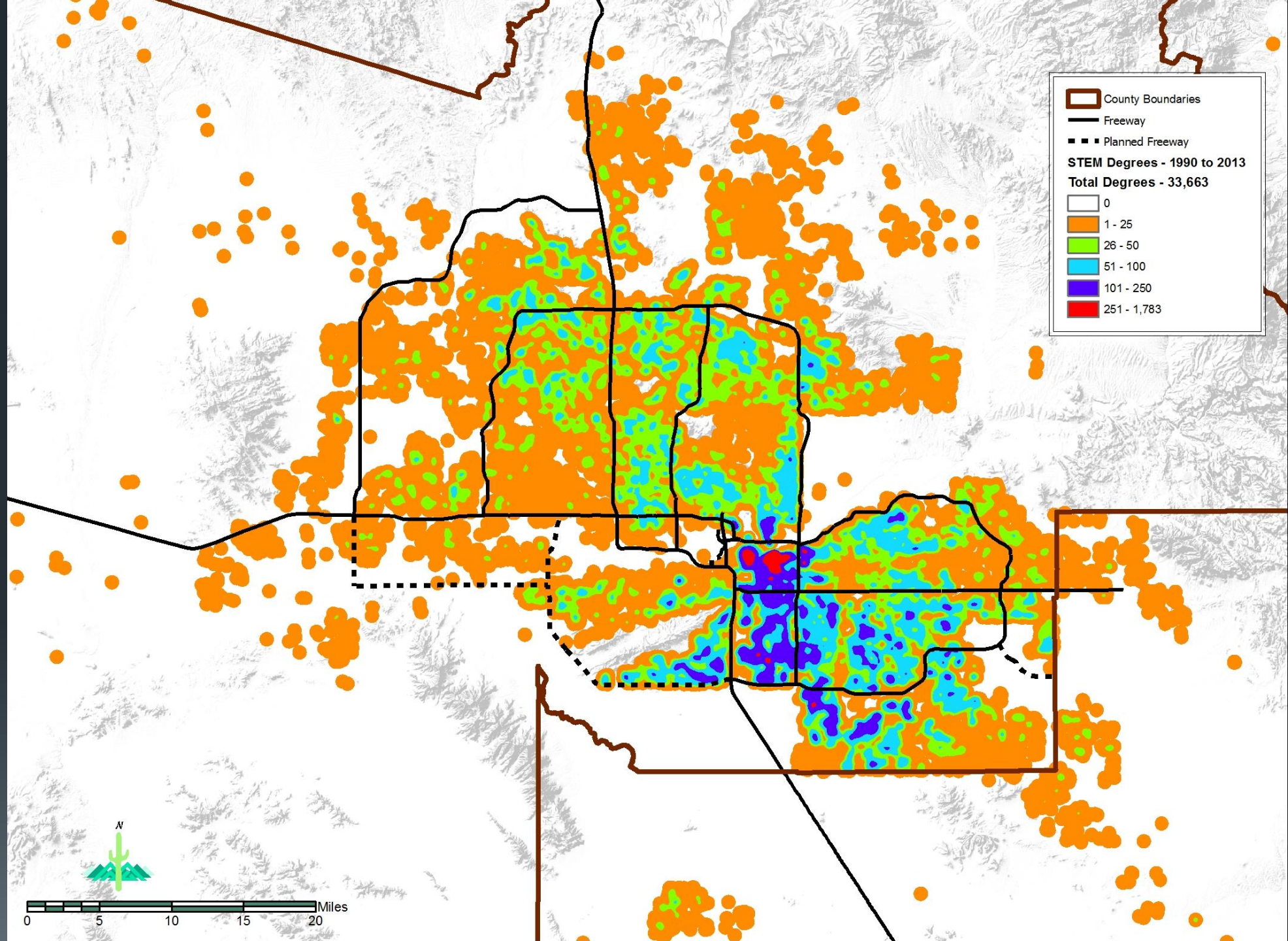
ASU: Engineering Degrees (1990-Spring 2014)



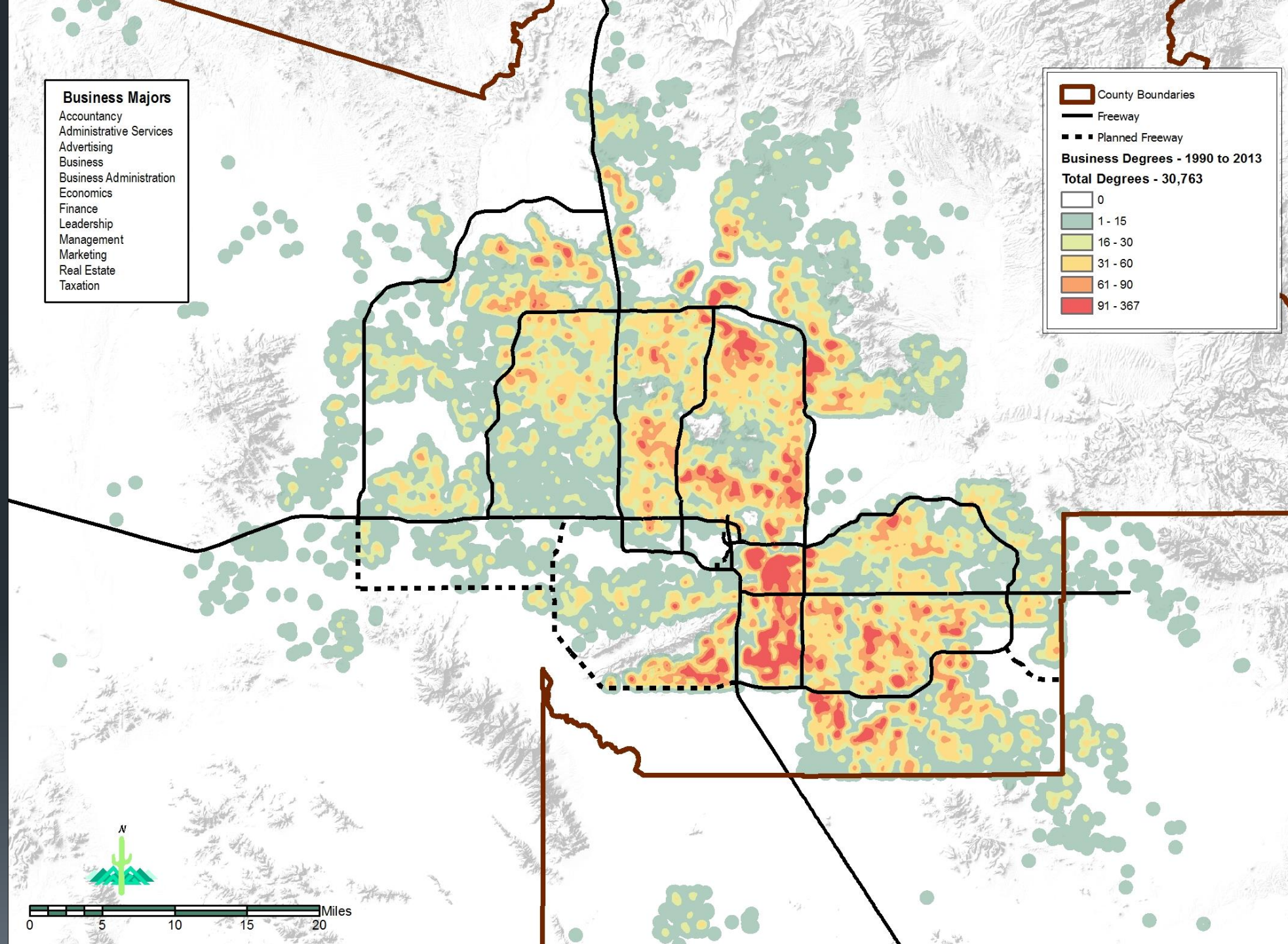
ASU: Medical Degrees (1990-Spring 2014)



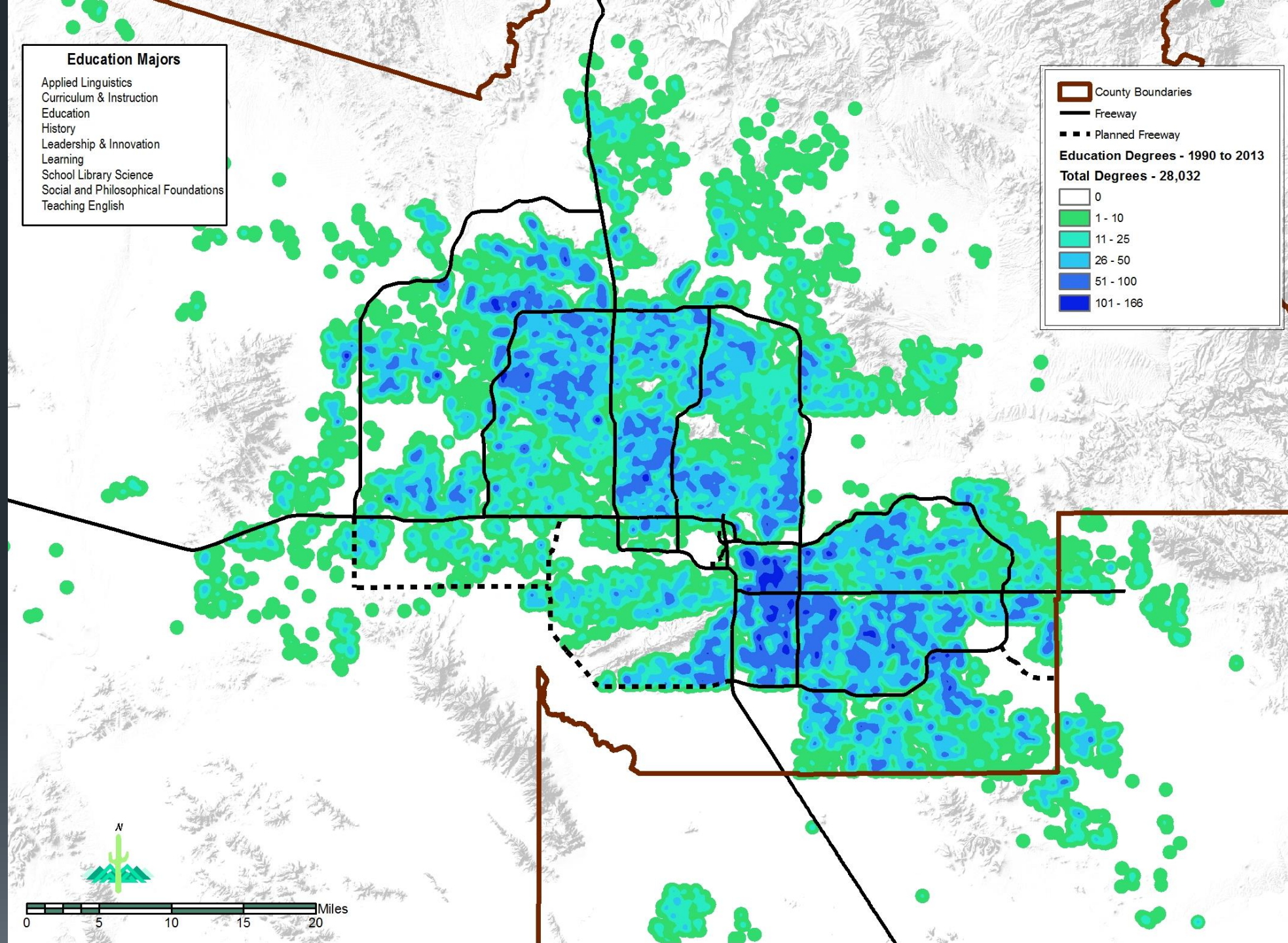
ASU: STEM Concentration Degrees (1990-Spring 2014)



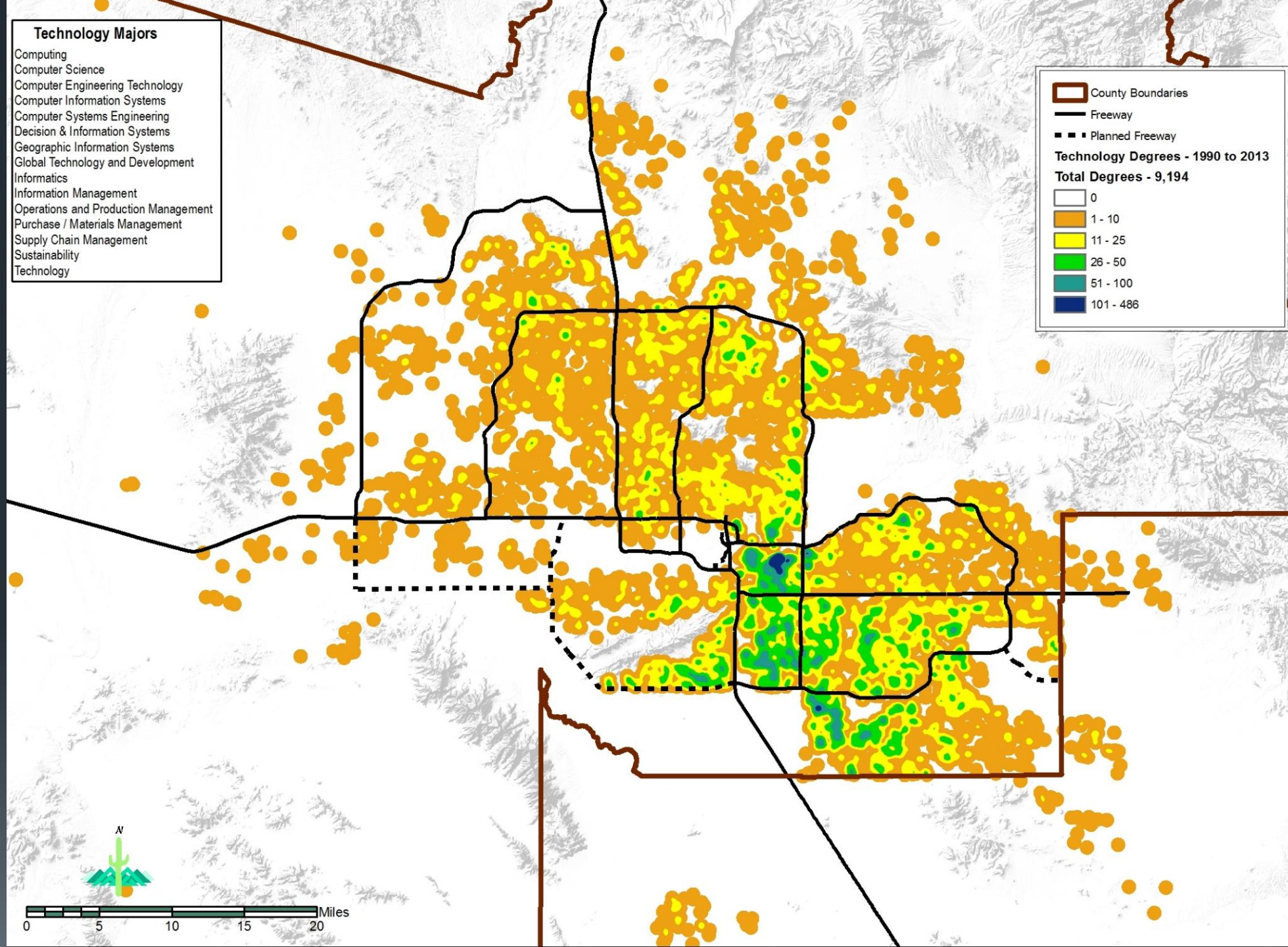
ASU: Business Major Degrees (1990-Spring 2014)



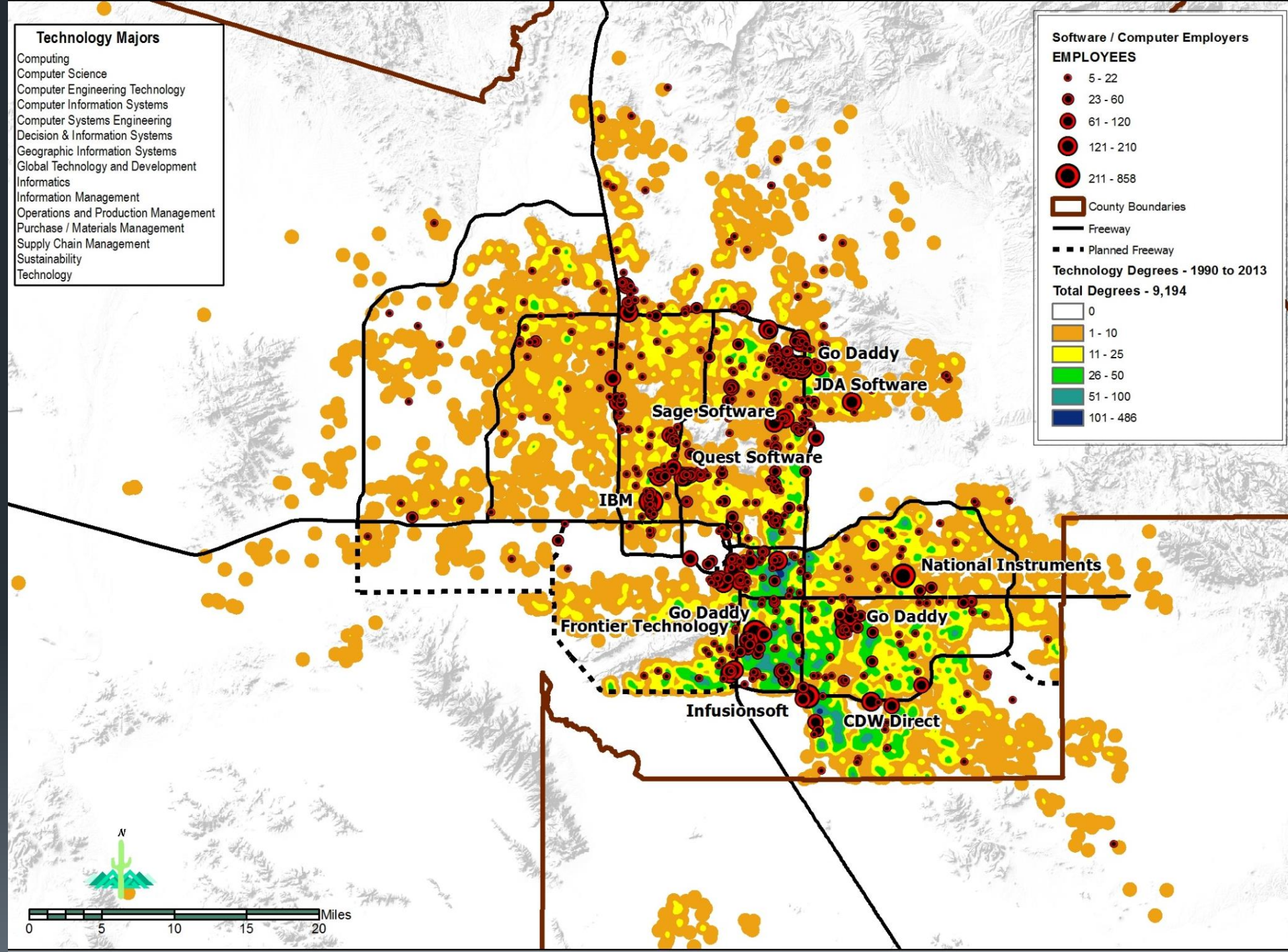
ASU: Education Degrees (1990-Spring 2014)



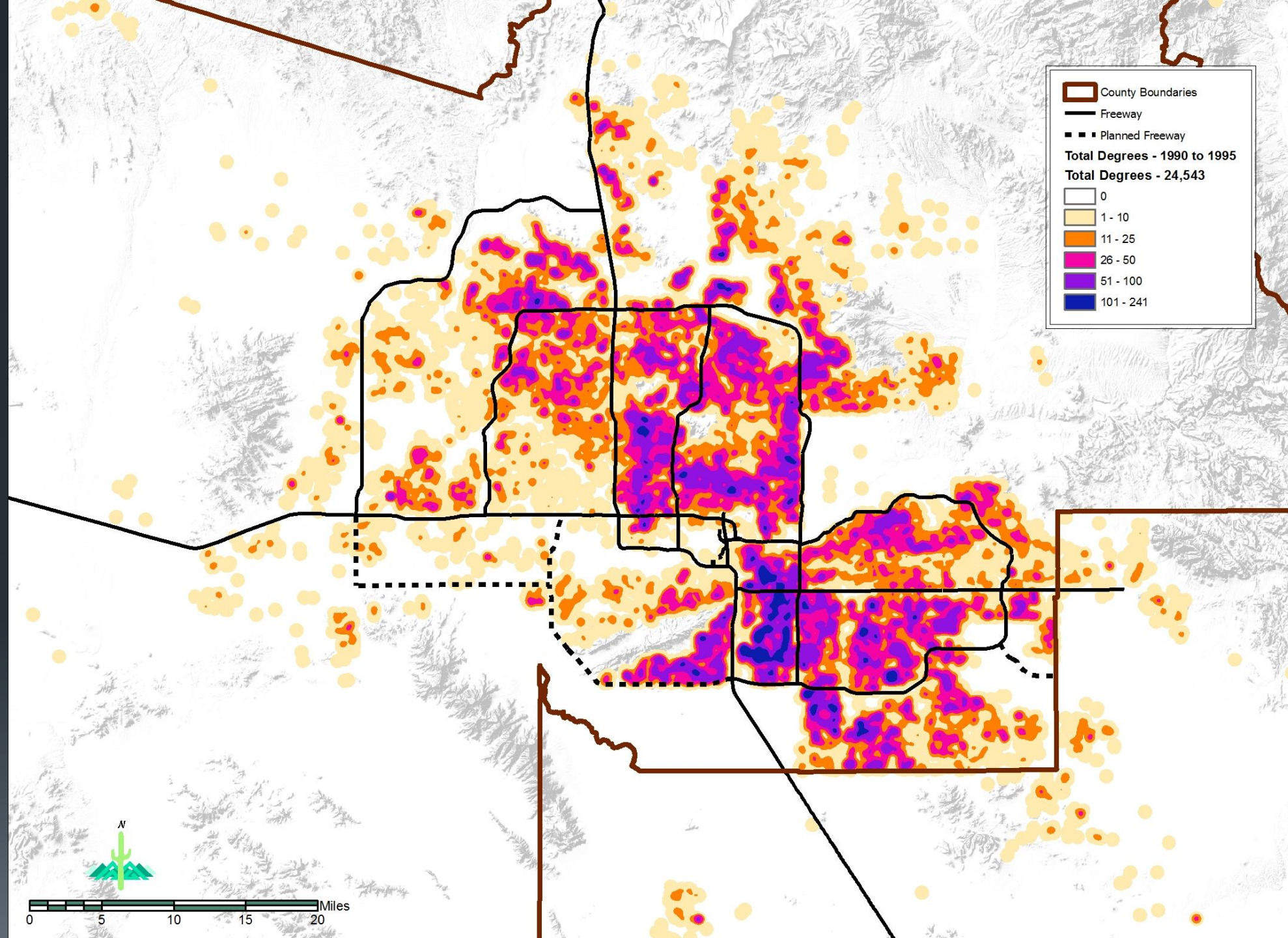
ASU: Technology Degrees (1990-Spring 2014)



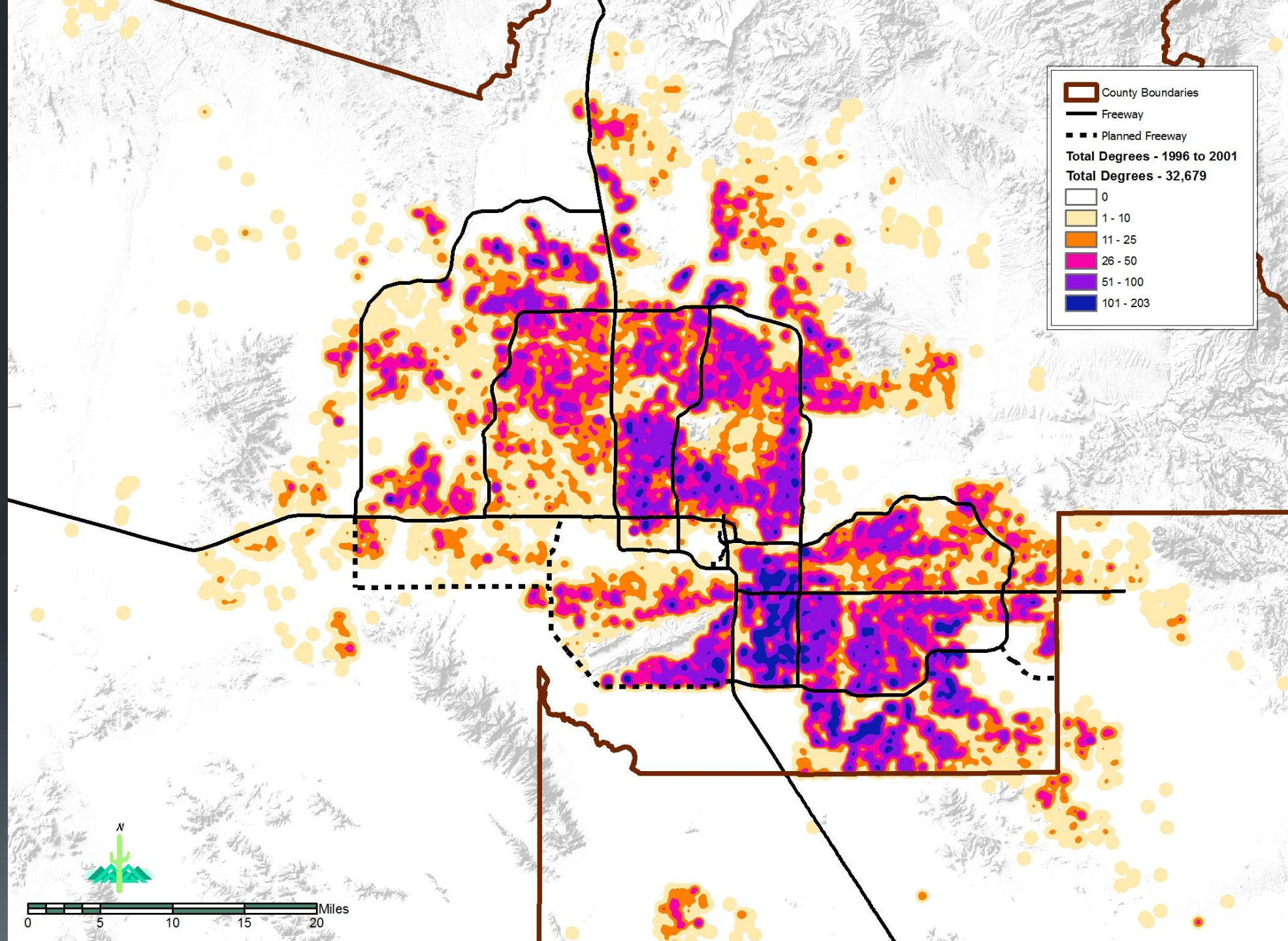
ASU: Technology Degrees (1990-Spring 2014)



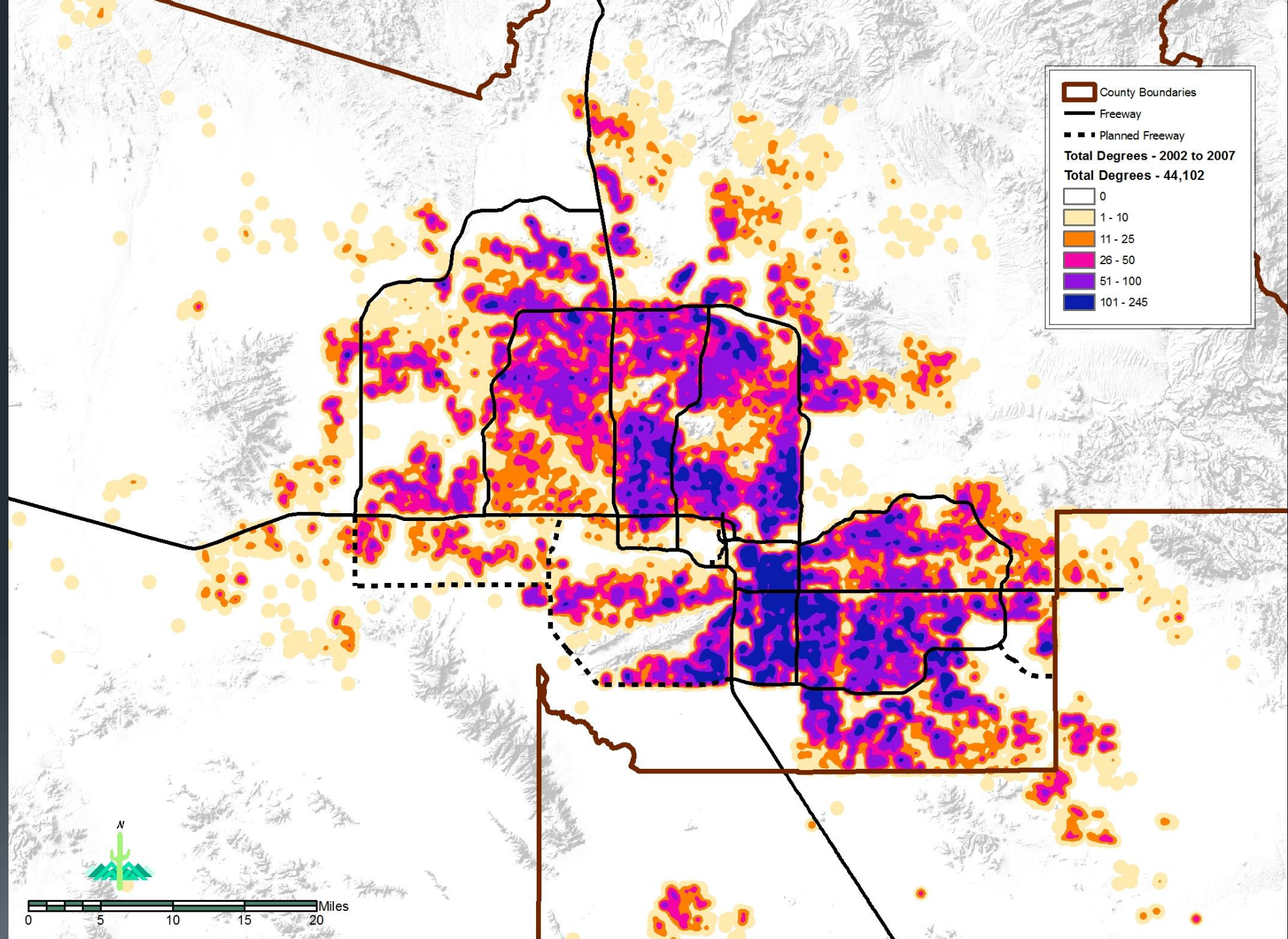
ASU:
1990 – 1995
24,543



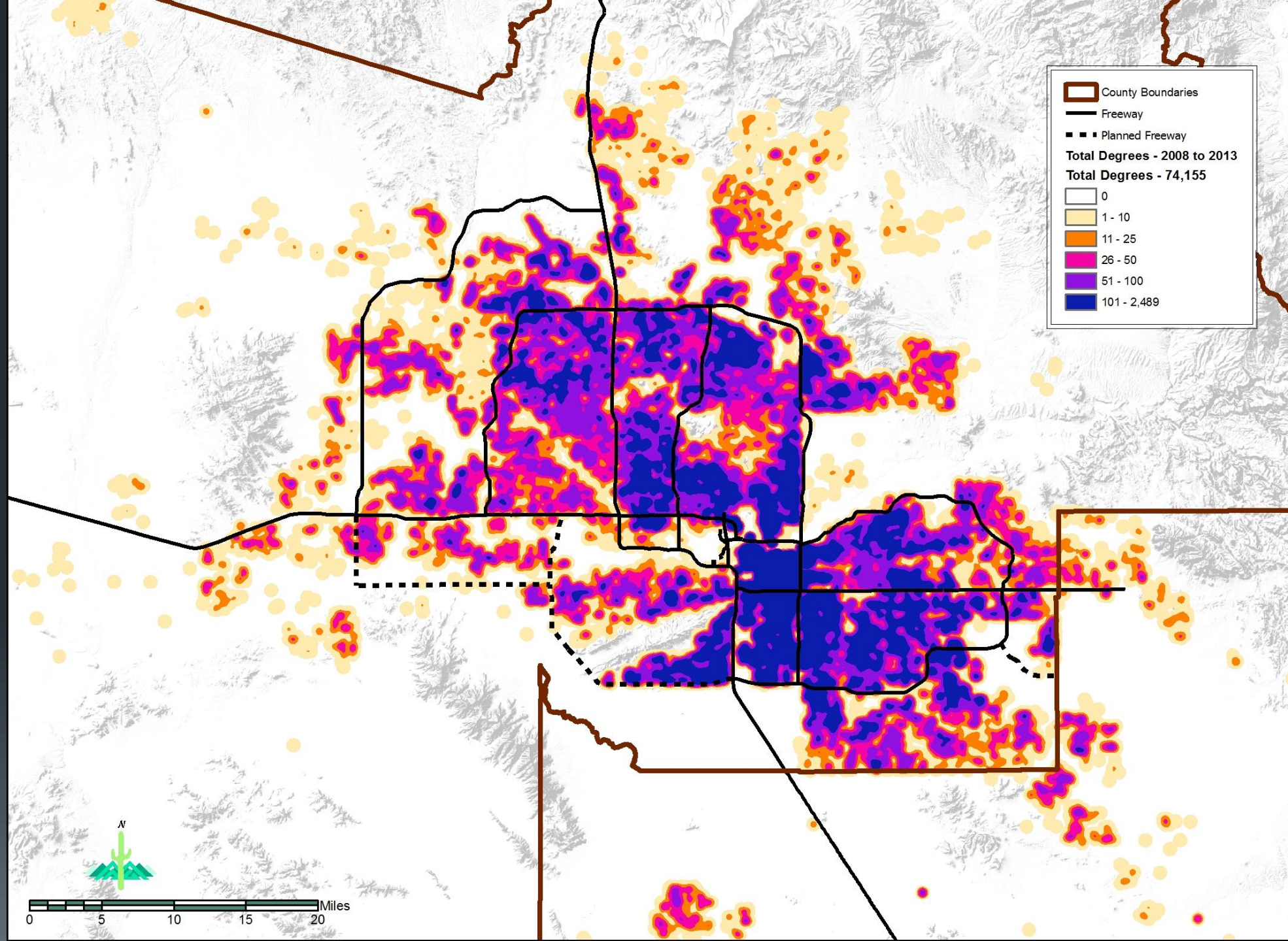
ASU:
1996 – 2001
32,679



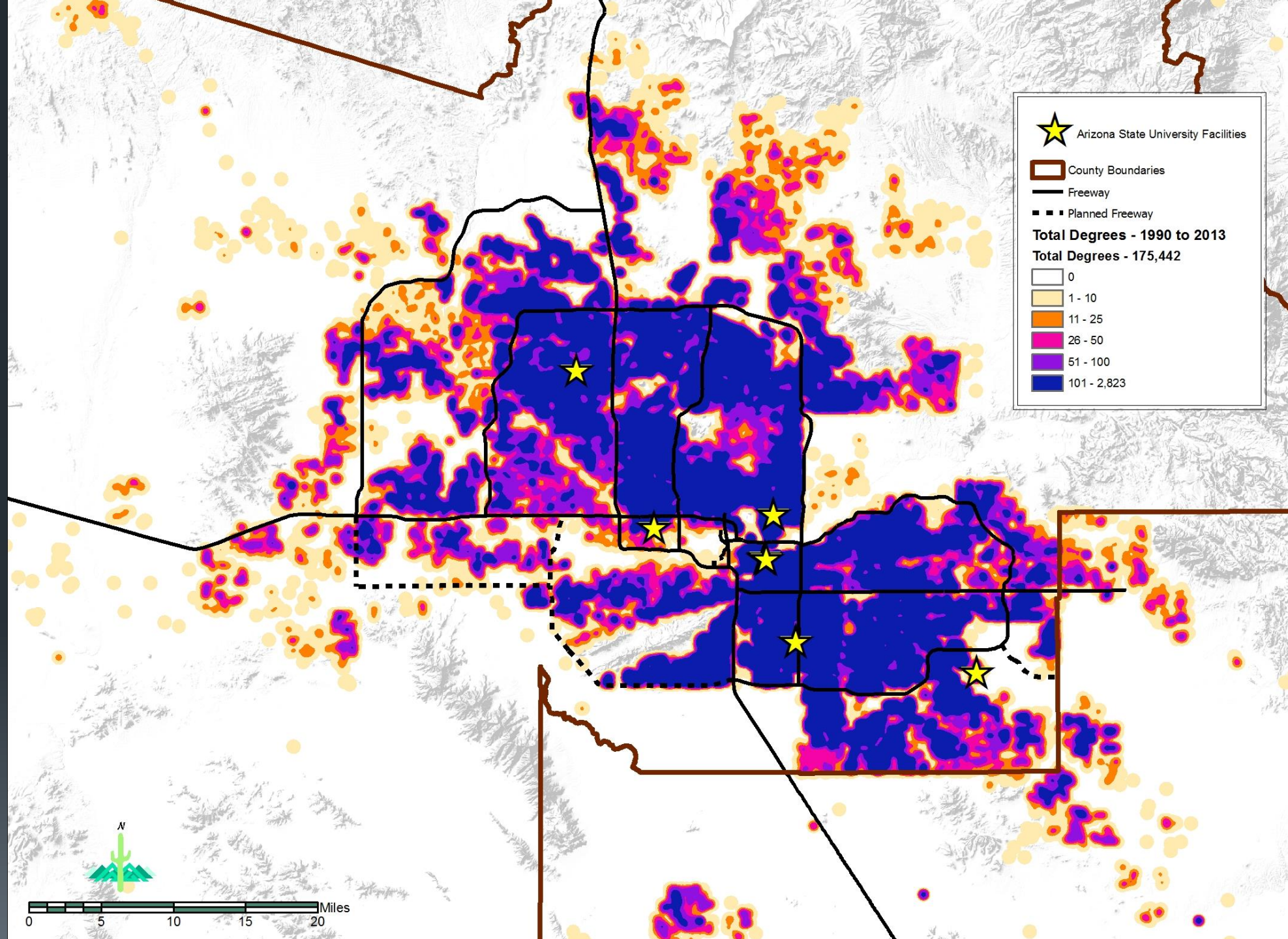
ASU:
2002 – 2007
44,102



ASU:
2008 – 2014
74,155



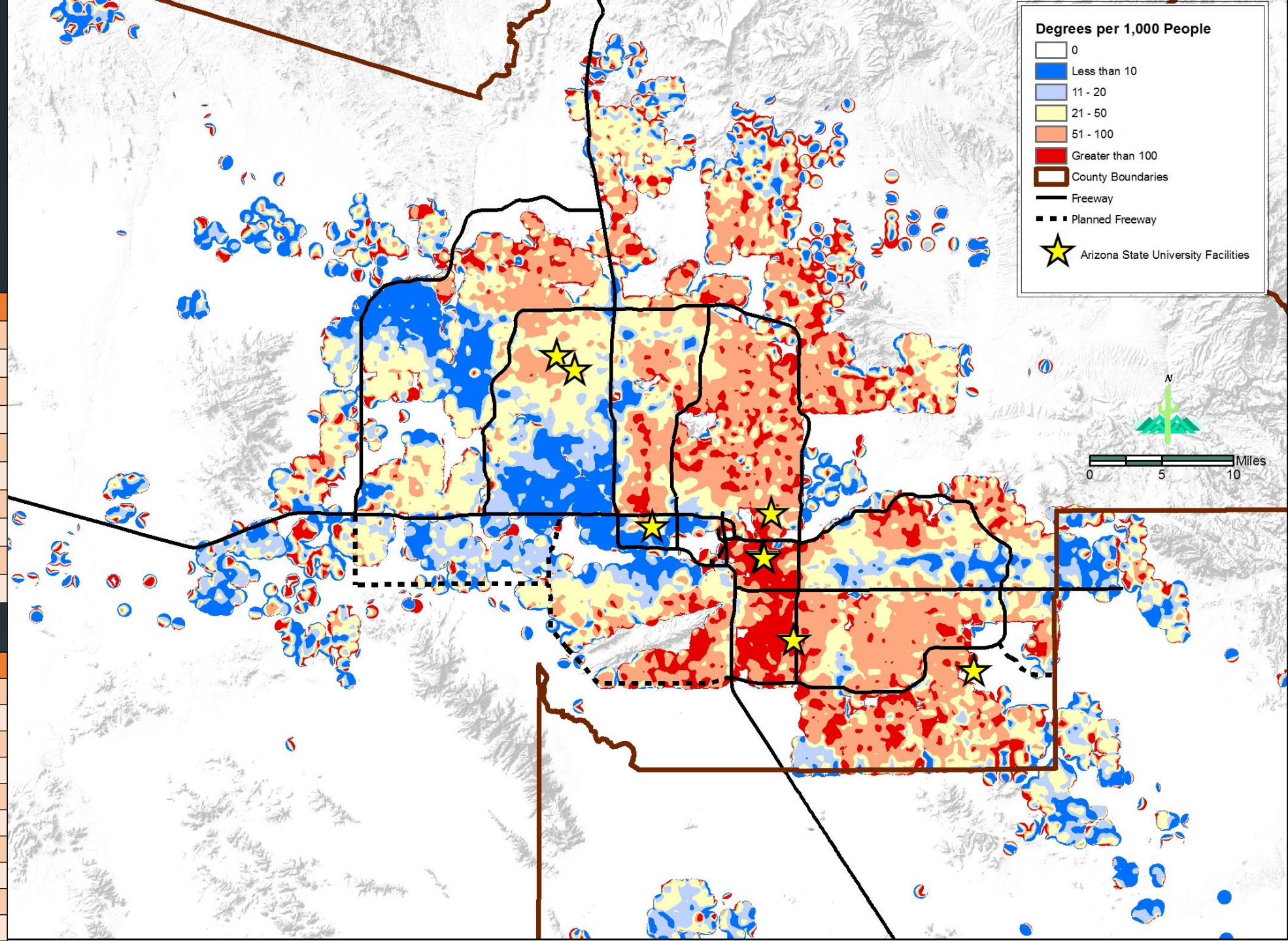
ASU:
1990-2014
175,442



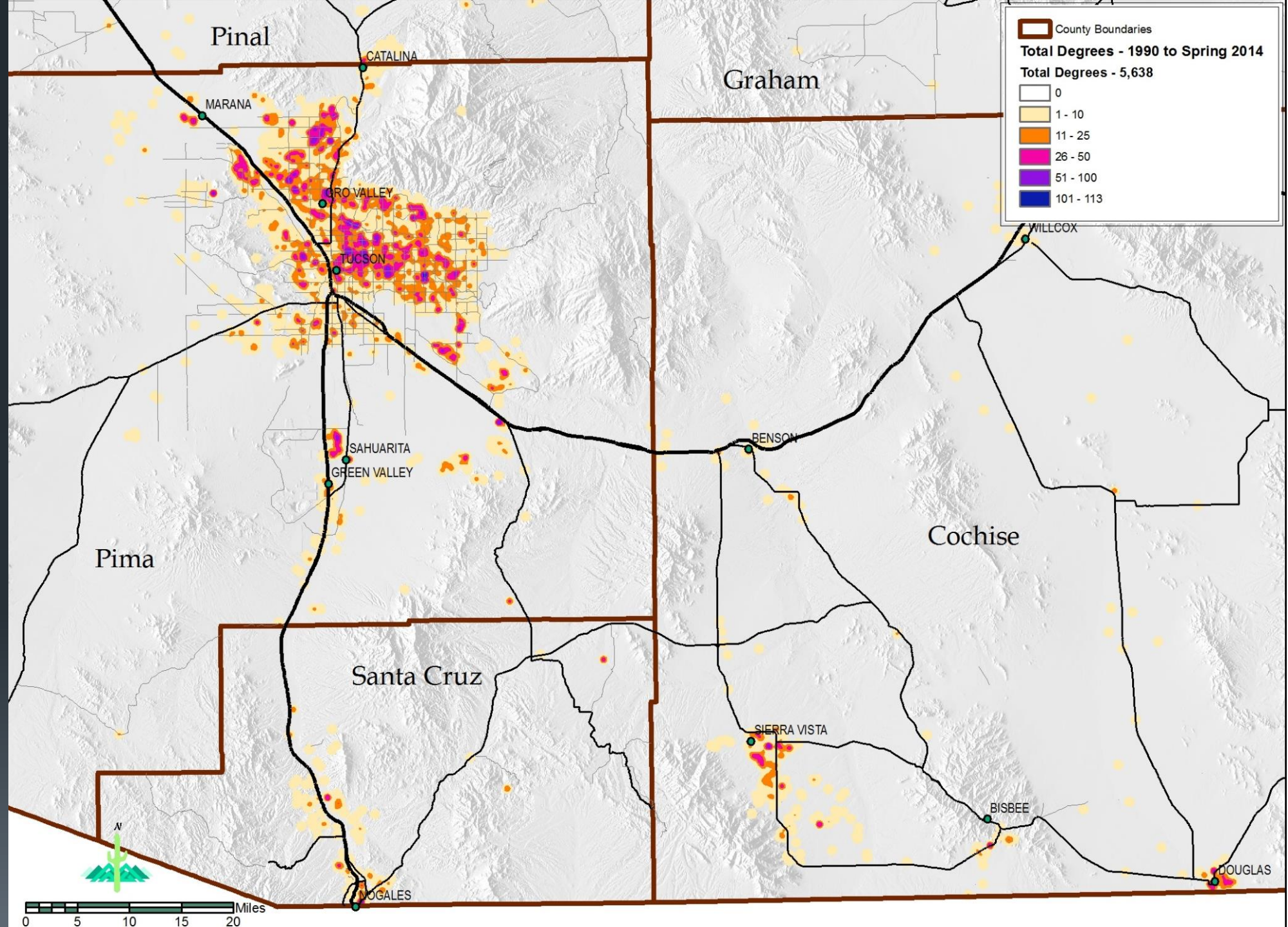
ASU: Degrees per 1000 Population (1990-Spring 2014)

Jurisdiction	Degrees
Phoenix	54,884
Mesa	33,831
Tempe	17,892
Chandler	17,289
Scottsdale	15,340
Glendale	6,882
Peoria	6,487
Surprise	2,396
Tucson	2,040
Goodyear	1,903

Jurisdiction	Degrees per 1000 People
Tempe	108.3
Mesa	75.1
Chandler	70.2
Scottsdale	69.0
Paradise Valley	67.3
Queen Creek	52.1
Litchfield Park	47.9
Carefree	43.2
Fountain Hills	42.2
Peoria	40.4

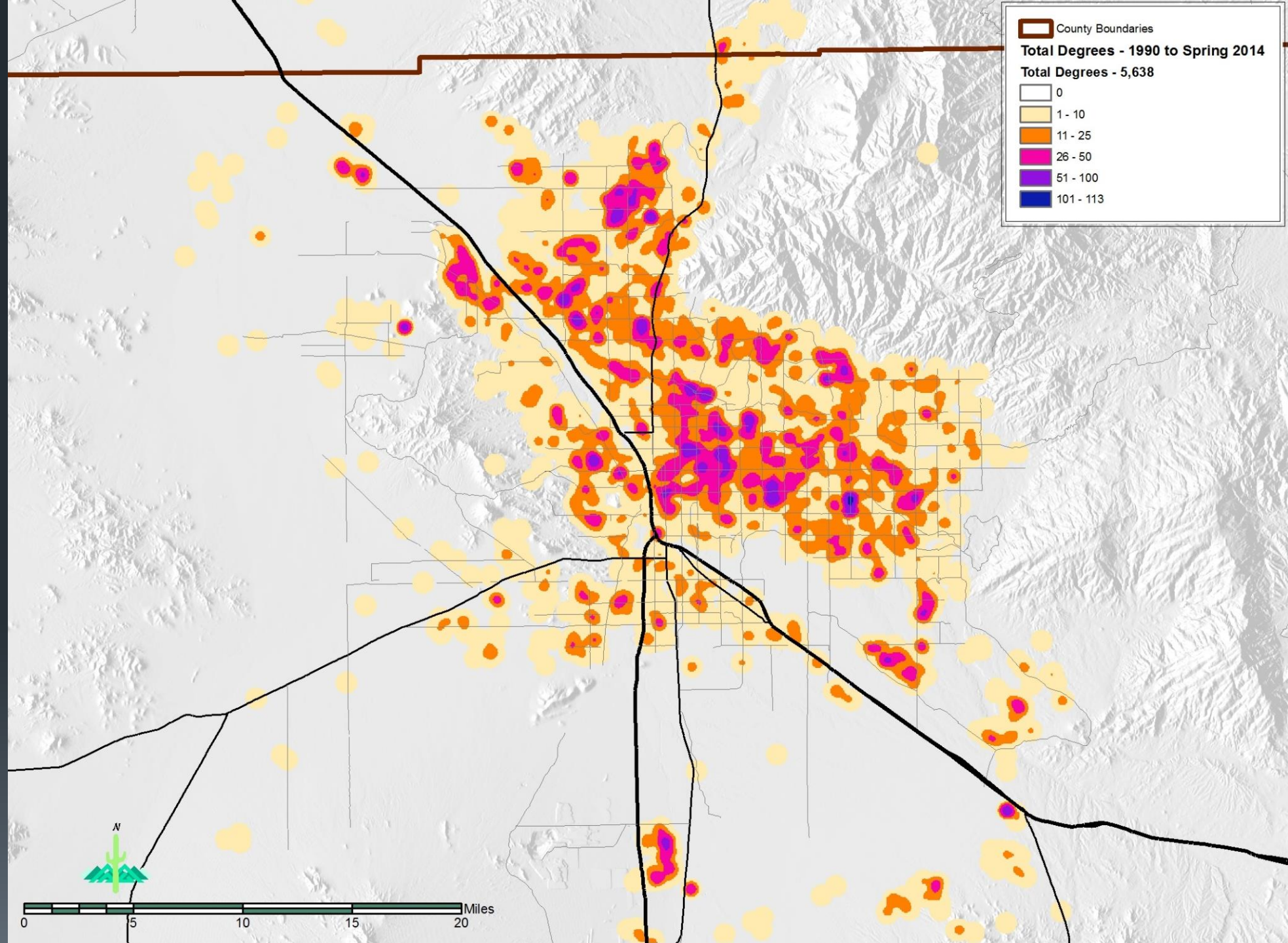


ASU Degrees:
1990-2014
5,638

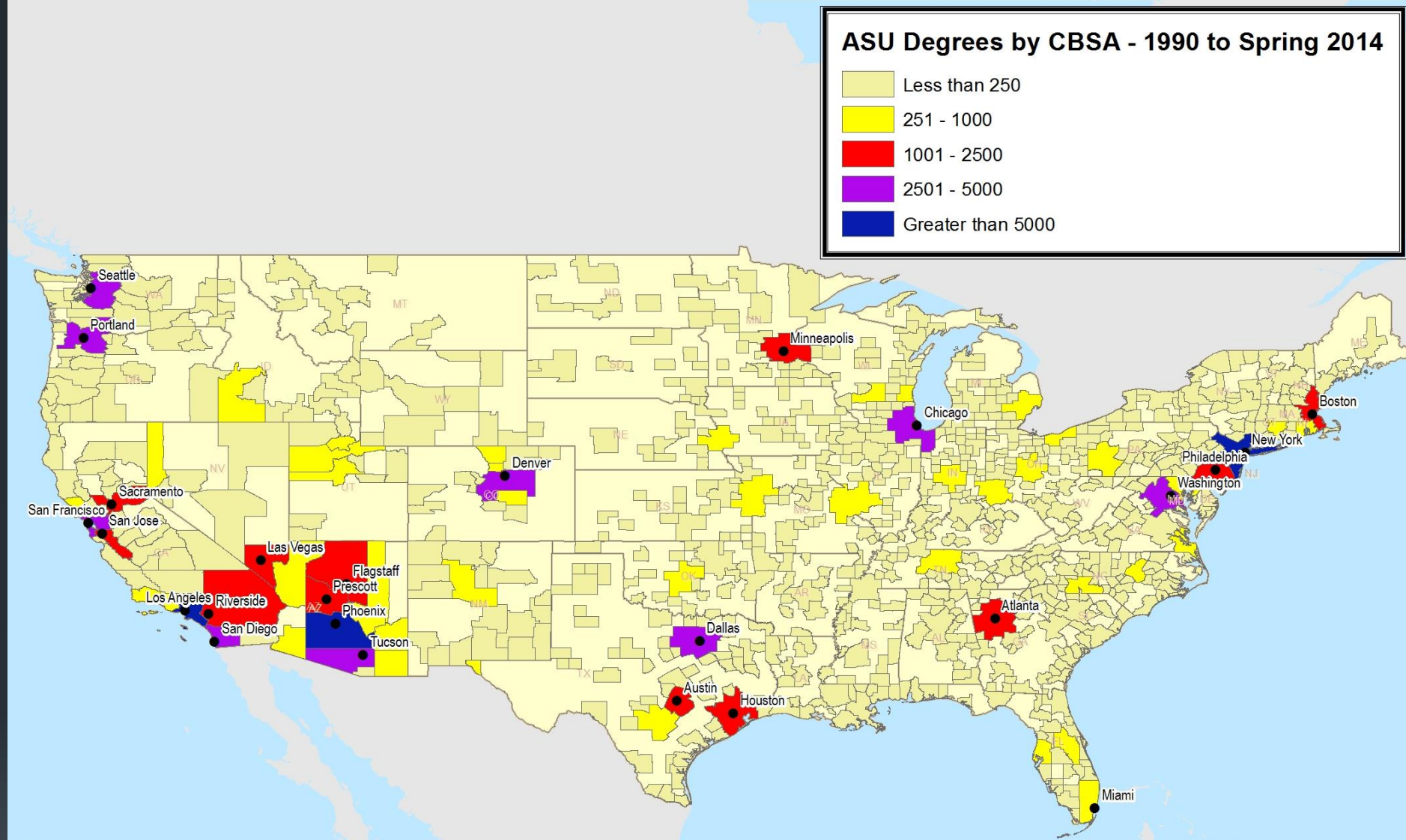


ASU Degrees: 1990-2014 5,638 – TOTAL

Engineering	5.80%
Medical	11.90%
Business	9.80%
Education	11.10%
Technology	4.00%
Communications/ Journalism	7.70%
Social work	27.20%
STEM	19.90%



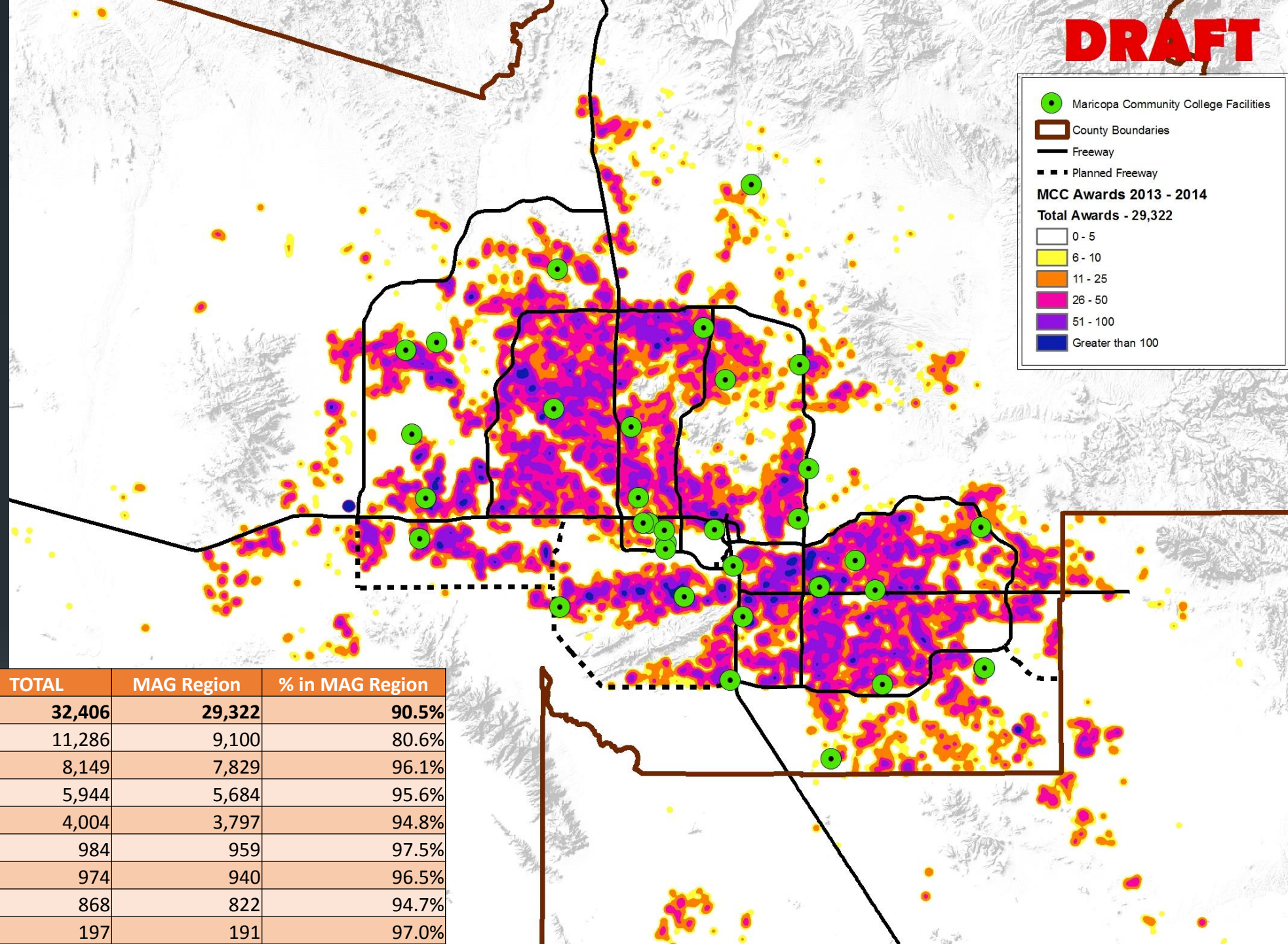
ASU: 1990-Spring 2014



CBSA	ASU Degrees 1990 to Spring 2014	% of Total	Rank
Phoenix-Mesa-Scottsdale, AZ	175,442	61.04%	1
Los Angeles-Long Beach-Santa Ana, CA	9,491	3.30%	2
New York-Northern New Jersey-Long Island, NY-NJ-PA	5,070	1.76%	3
San Francisco-Oakland-Fremont, CA	4,801	1.67%	4
Tucson, AZ	4,793	1.67%	5
Total ASU Degrees	287,442		

Maricopa Community College: 2013-14

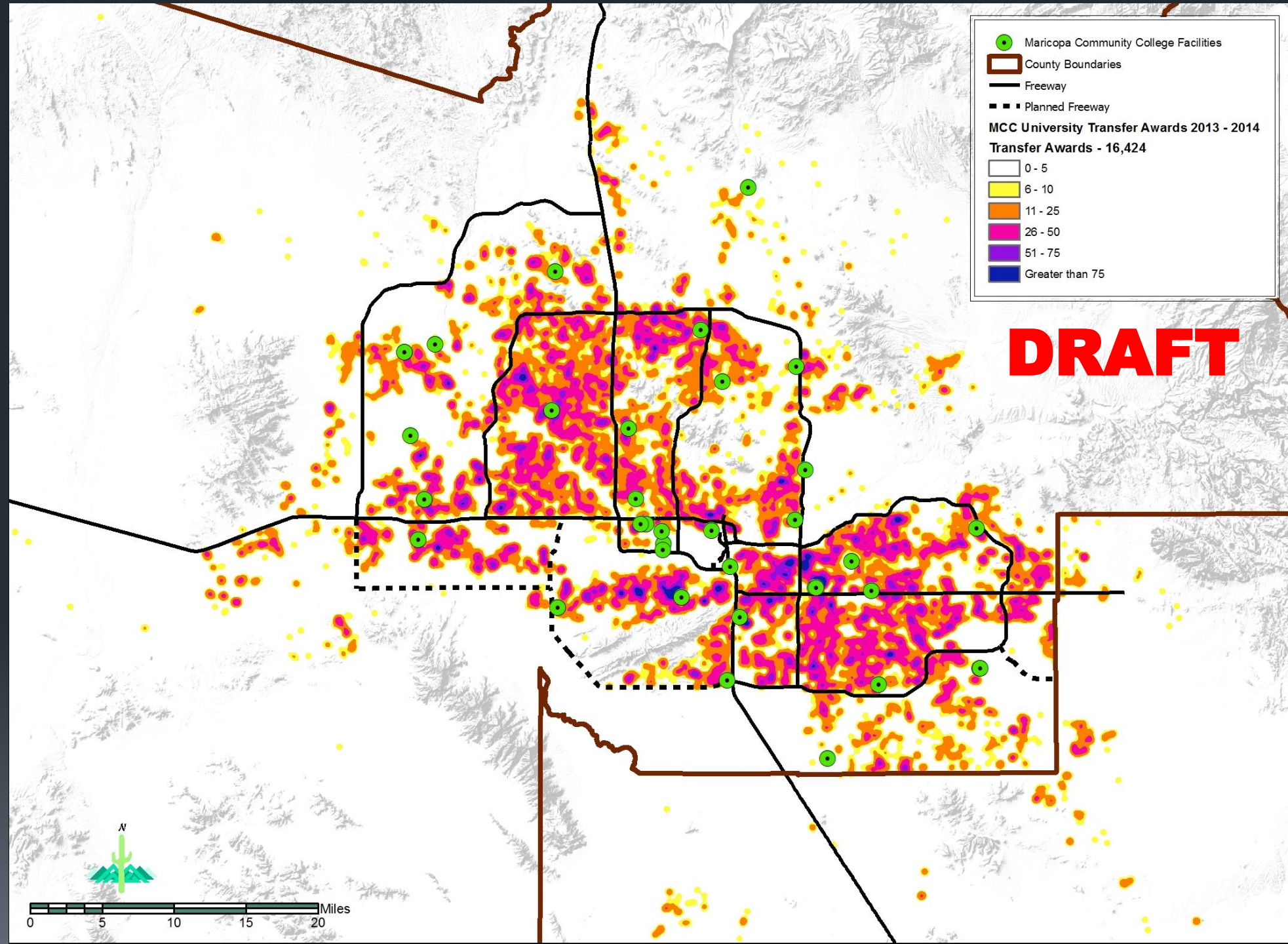
29,332



Award Type	TOTAL	MAG Region	% in MAG Region
All	32,406	29,322	90.5%
CCL - Certificates of Completion	11,286	9,100	80.6%
GEC - General Education Curriculum	8,149	7,829	96.1%
AA - Associate in Arts	5,944	5,684	95.6%
AAS - Associate in Applied Science	4,004	3,797	94.8%
AB - Associate in Business	984	959	97.5%
AS - Associate in Science	974	940	96.5%
AGS - Associate in General Studies	868	822	94.7%
AC - Academic Certificate	197	191	97.0%

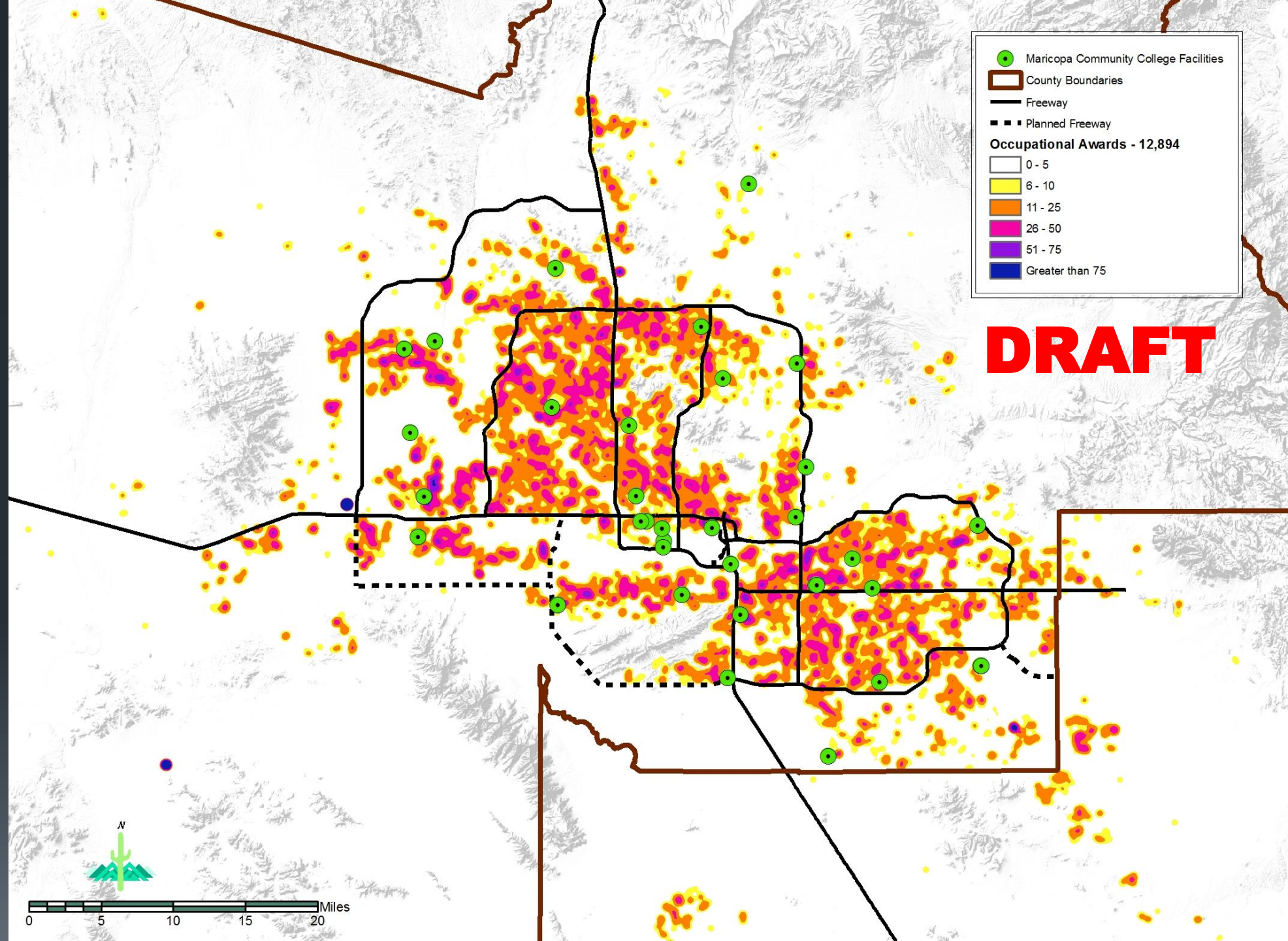
Maricopa Community College: University Transfer Awards (2013-14)

16,424



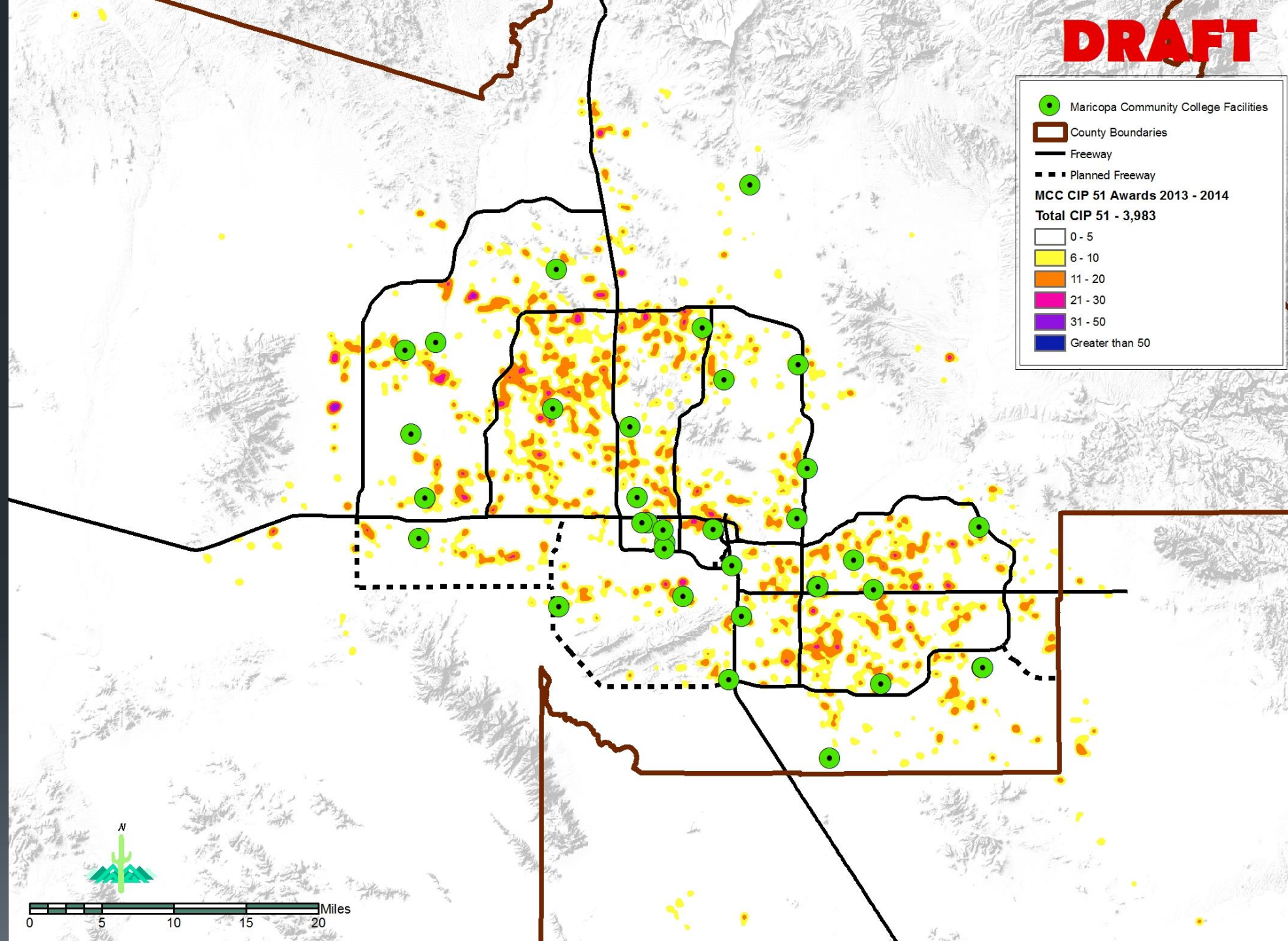
Maricopa Community College: Occupational Awards (2013-14)

12,894

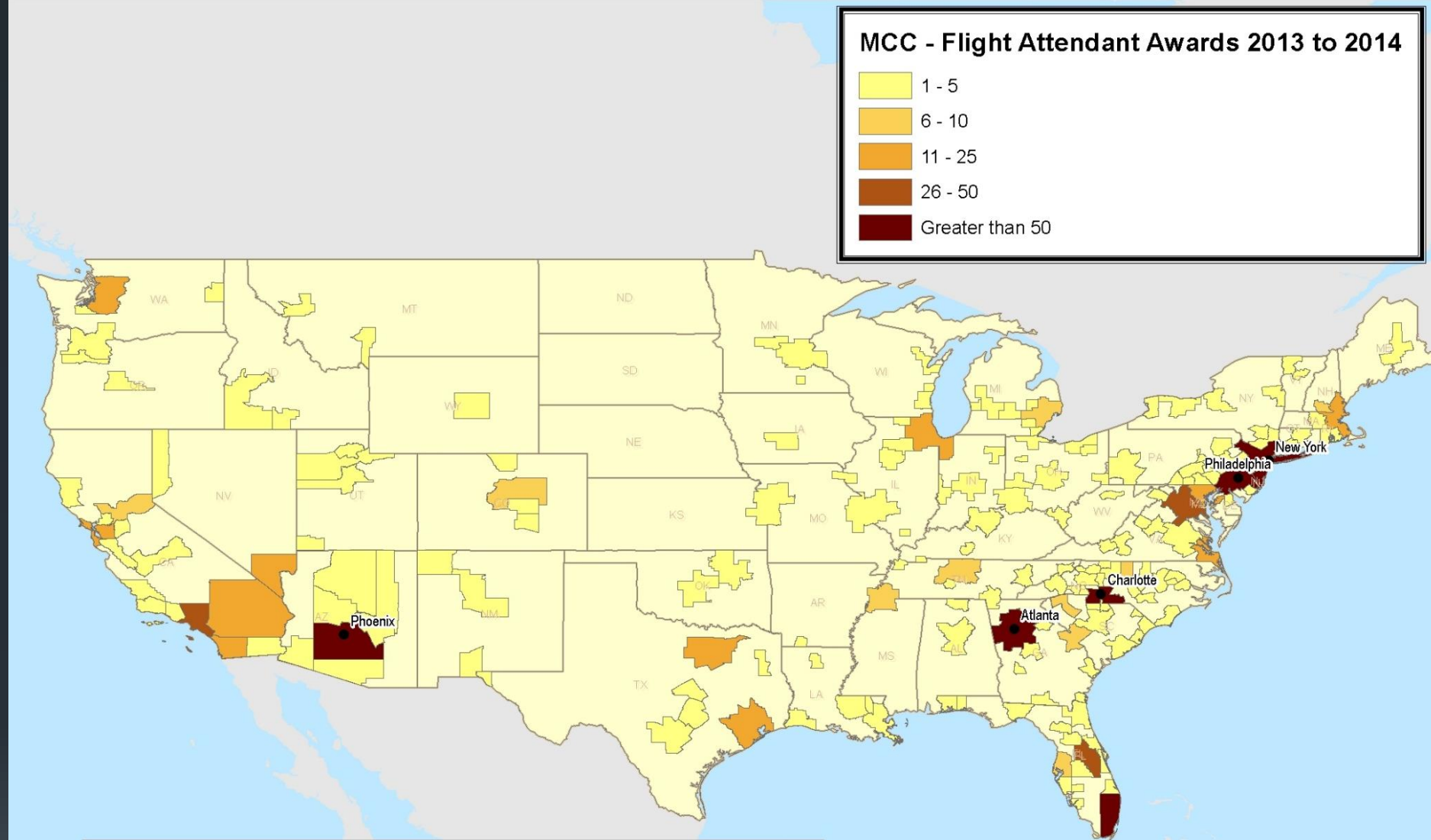


Maricopa Community College: CIP 51 Health Professionals Awards (2013-14)

3,983



MCC: Flight Attendant Awards 2013-2014



CBSA	MCC Flight Attendant 2013 to 2014	% of Total	Rank
Phoenix-Mesa-Scottsdale, AZ	105	9.49%	1
Atlanta-Sandy Springs-Marietta, GA	85	7.68%	2
New York-Northern New Jersey-Long Island, NY-NJ-PA	82	7.41%	3
Charlotte-Gastonia-Concord, NC-SC	68	6.14%	4
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	57	5.15%	5
Total MCC Flight Attendant Awards	1,107		

Joint Technical Education District (JTED)

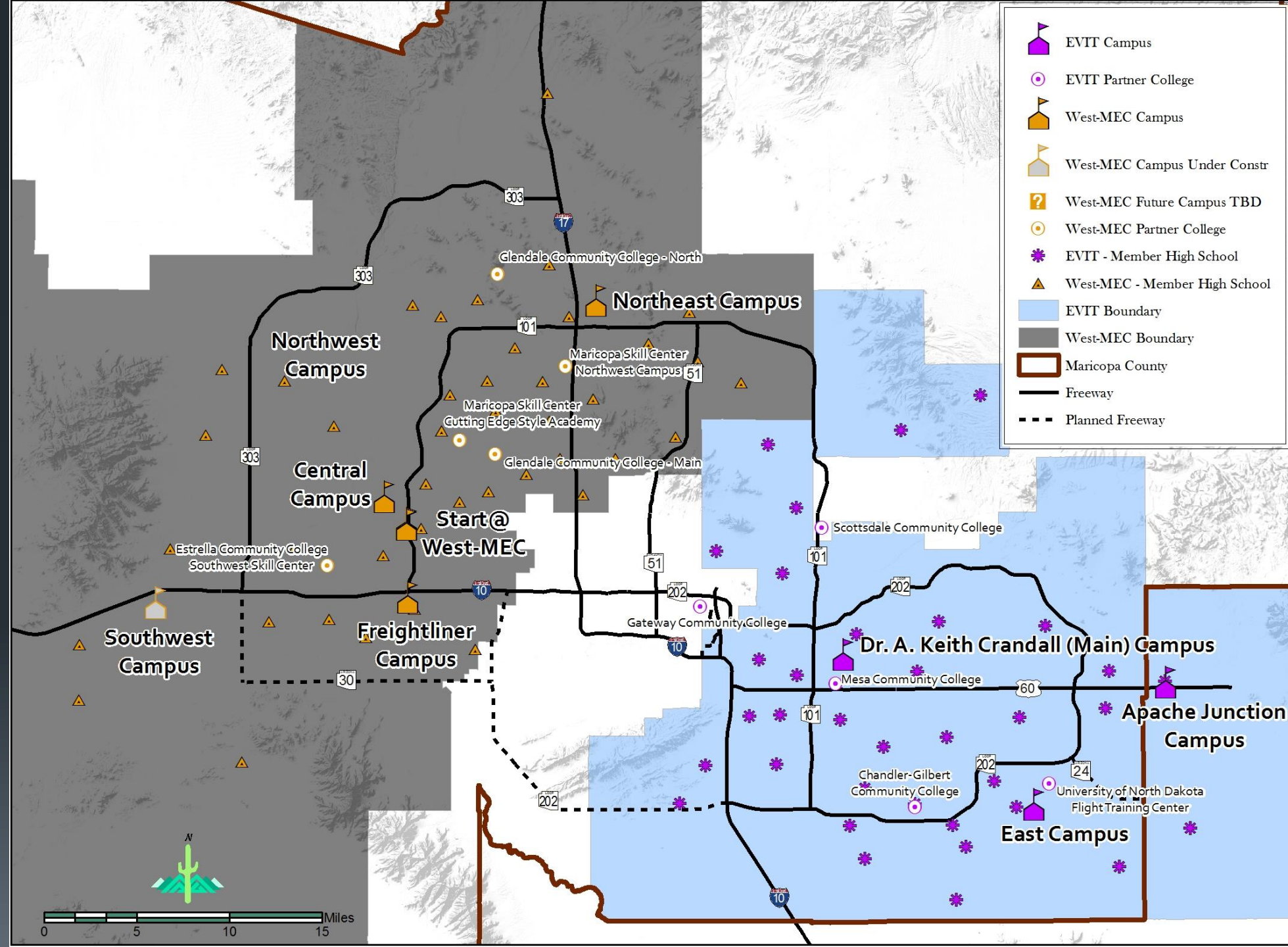
Campuses:
East Valley Institute of Technology (EVIT): 3

Western Maricopa Education Center (West-MEC): 4 + 2

10 Partner Colleges

Member High Schools
EVIT : 35
West-MEC: 45

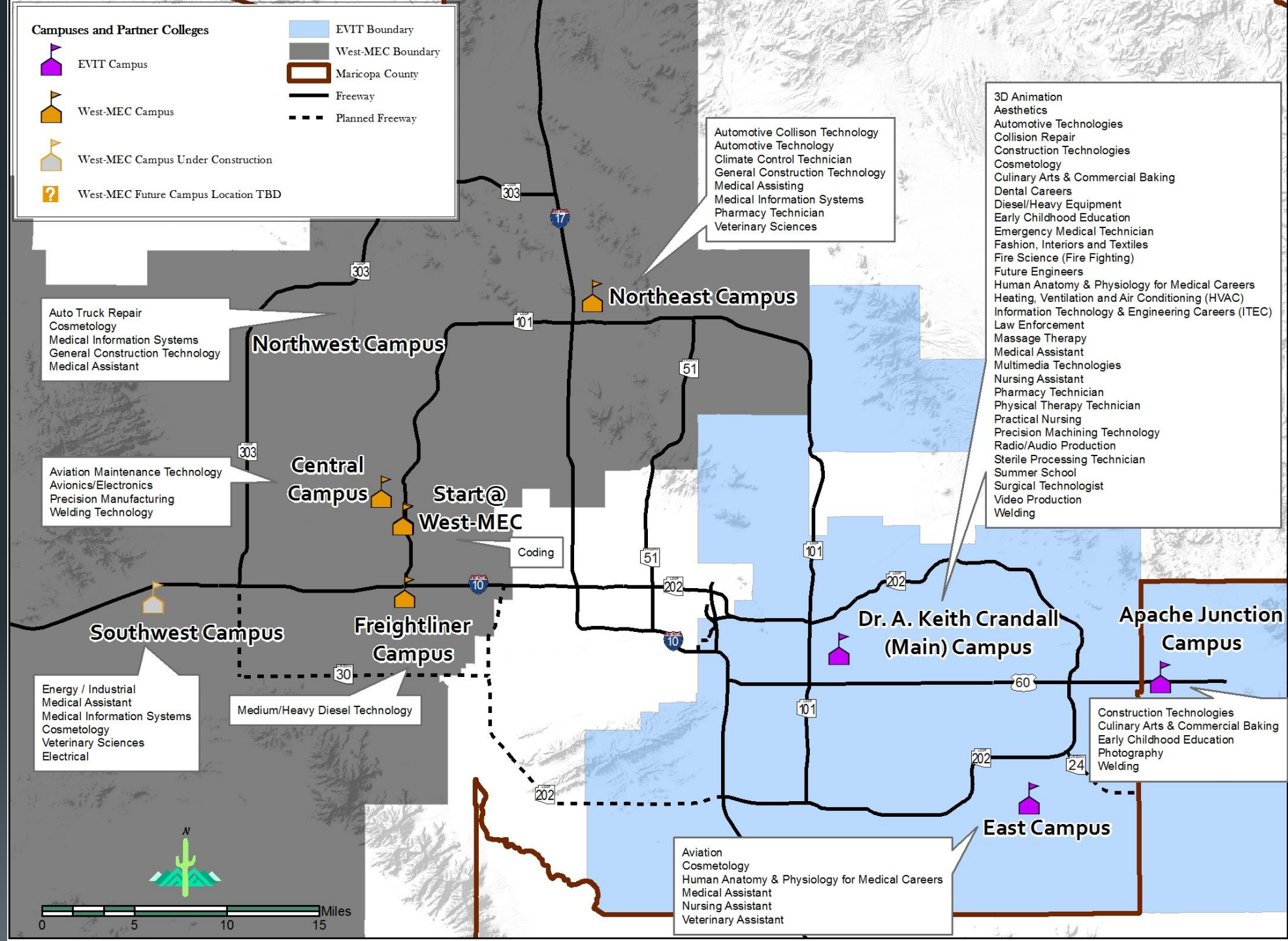
Need to contact:
Central Arizona Valley Institute of Technology (CAVIT)



Enhance and support career and technical education programs for high school students

EVIT:
33 High School +
10 Adult Ed

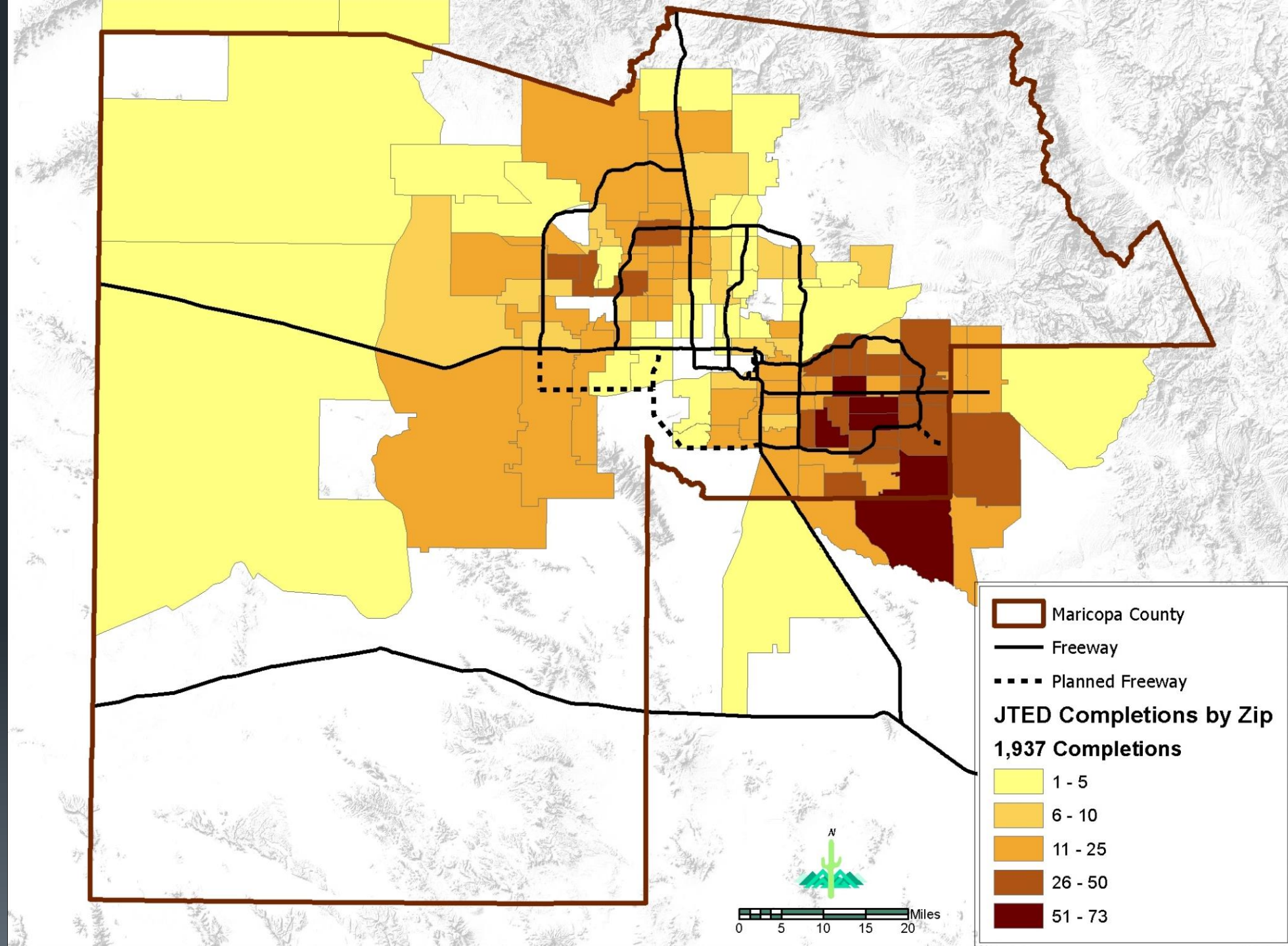
West-MEC:
18 Satellite programs
on high school
campuses +
14 Central programs +
3 (+4) Adult Ed



Completions (2013-2014)

West-MEC: 694
Cosmetology 355
EMT 88

EVIT: 1,243
Nursing Asst. 184
Cosmetology 162



Additional Data Sources



Tool/Data	Data Level	Years	Geography	Capabilities	Web Address
On the Map LEHD - Longitudinal Employer-Household Dynamics	2 digit NAICS	2002 to 2011	User defined polygons or predefined Zip being the smallest	Map worker inflow and outflow, age and income profiles of workers	http://onthemap.ces.census.gov/
County Business Patterns	2 digit NAICS	1998 to 2012	County and Zip	Establishments, jobs, payroll	http://www.census.gov/econ/cbp/
Annual Survey of Manufactures	4 digit NAICS for Manufacturing Sector	2004 to 2011	State	Jobs, payroll, cost of materials, value of shipments	https://www.census.gov/manufacturing/asm/
Economic Survey	6 digit NAICS for several employment sectors	2002; 2007; 2012 data releasing in 2015	Zip	Establishments by sales range	https://www.census.gov/econ/sbo/
American Community Survey (ACS) - 1 year	Occupation	2005 to 2013	Places 65,000+ Population	Occupation, Industry	https://www.census.gov/acs/www/
American Community Survey (ACS) - 3 year	Occupation	2007 to 2013	Places 10,000+ Employed Population	Occupation, Industry	https://www.census.gov/acs/www/
American Community Survey (ACS) - 5 year	Occupation	2009 to 2013	Census Tract; Zip	Occupation, Industry	https://www.census.gov/acs/www/
Bureau of Labor Statistics (BLS)	Occupation	1997 to 2013	MSA	Jobs and Wages	http://www.bls.gov/oes/
Quarterly Workforce Indicators (QWI) Explorer	Employment	2009 to 2013	MSA	Quarterly Employment and Earnings	http://qwiexplorer.ces.census.gov/

Next Steps

- Additional Analytics
 - Retention in Arizona and region by specialization
 - Additional data going back to 1980 (ASU)
 - Metrics by employment center
 - Mapping by CIP (Classification of Instructional Programs) codes
- Additional Education Institutions
 - University of Arizona
 - Northern Arizona University
 - Private Colleges
 - Apollo Education Group
 - Grand Canyon University
 - Midwestern University
 - Trade Schools
- Resources to directly connect business needs to institutional infrastructure
- Explore development of interactive mapping/reporting tools



Labor Force Analytics

Mark Roberts
Sr. Project Manager

Anubhav Bagley
Information Services Manager

(602) 254-6300
www.azmag.gov

MAG POPTAC Committee

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